



W.C. 27th April

Maths Answers

Monday

Multistep addition and subtraction problems

Mild

- 288
- 24,590
- £2.77
- 18.75 litres
- 214



Complete the models.

a)



b)

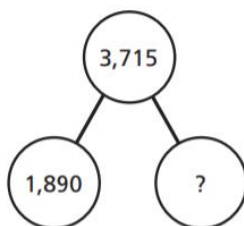
23,000		
12,365	4,017	6,618

Medium

- £245
- 1066
- £122,748
- 2,390,426
- 601,827

2 Calculate the missing numbers. Show your method.

a)



2	16			
3	7	1	5	
-	1	8	9	0
	1	8	2	5

b)

?		
2,354	750	1,500

	2	3	5	4
		7	5	0
+	1	5	0	0
	4	6	0	4
	1			

Spicy

1. 157,307
2. 624,597
3. £707,913
4. 560,194
5. Fish fingers: 875,156
Chips: 1,583,183

6 What is the difference between A and B?



The difference between A and B is 275,000

7

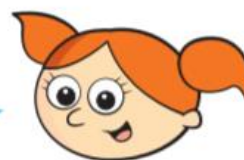


Use each digit card once to complete the calculation.

$$\boxed{9} \boxed{7} \boxed{5} - \boxed{3} \boxed{1} \boxed{0} = \boxed{665} \quad (\text{various answers})$$

8

I am thinking of a number. I add 200,000, then subtract half a million, then add a quarter of a million. Then I round to the nearest 10, which is two million and fifty.



What number could Alex have been thinking of to start with?

$$\begin{array}{ccccccc} \rightarrow & +200,000 & \rightarrow & -500,000 & \rightarrow & +250,000 & \rightarrow \\ \underbrace{\hspace{10em}} & & & -50,000 & & & \\ & & & & & 2,000,045 & \\ & & & & & -2,000,054 & \end{array}$$

Alex could have been thinking of $2,050,045$
 $-2,050,054$

Tuesday

Short and long multiplication

Mild

4b. $8,126 \times 4 = 32,504$. Chara has not used 0 as a place holder.

5b.

	7	0	8	4
x				2
1	4	1	6	8
		1		

2

Complete the multiplications.

a)

		1	2	3	5
	x			5	3
		3	7	0	5
+	6	1	7	5	0
		6	5	4	5

b) [

		4	0	3	6
	x			2	4
	1	6	1	4	4
+	8	0	7	2	0
	9	6	8	6	4

c)

		6	9	7	8
	x			7	6
	4	1	8	6	8
4	8	8	4	6	0
5	3	0	3	2	8

Medium

7a. $5,207 \times 4 = 10,828$. Cassie has not added the tens when exchanging.

7b. $8,126 \times 9 = 73,134$. Sanjay has not added the hundreds when exchanging.

3

Write the correct multiplications to complete the calculations.

$$1,247 \times 37$$

$$2,031 \times 29$$

$$2,413 \times 23$$

		2	4	1	3	
	×			2	3	
		7	2	3	9	
+	4	8	2	6	0	
		5	5	4	9	9

		1	2	4	7	
	×			3	7	
		8	7	2	9	
+	3	7	4	1	0	
		4	6	1	3	9

		2	0	3	1
	x			2	9
		1	8	2	7
					9
+		4	0	6	2
					0
		5	8	8	9

6a. I agree with Nina because if you multiply $4,215 \times 20$ and then subtract two lots of 4,215 you will get the answer.

A car park has 230 rows of 17 spaces.

There are 1,250 cars already parked.

How many empty spaces are there?

$$\begin{array}{r} 230 \\ \times 17 \\ \hline 1610 \\ 2300 \\ \hline 3910 \end{array} \qquad \begin{array}{r} 3\overset{8}{\cancel{9}}10 \\ - 1250 \\ \hline 2660 \end{array}$$

What is the greatest product you can make that is also an odd number?

$$\begin{array}{r} 621 \\ \times 53 \\ \hline 1863 \\ 31050 \\ \hline 32913 \end{array}$$

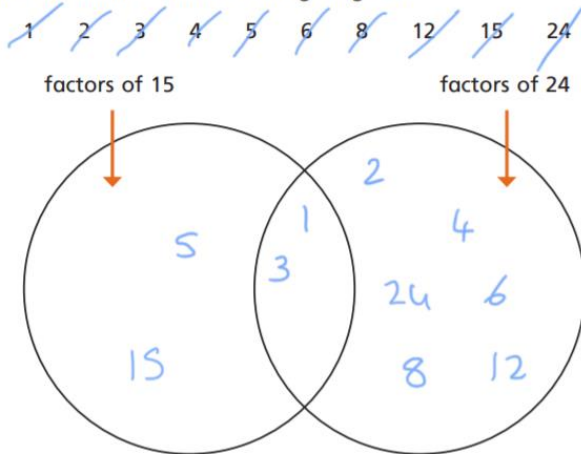
32,913

Wednesday

Identify common factors, common multiples and prime numbers

Mild

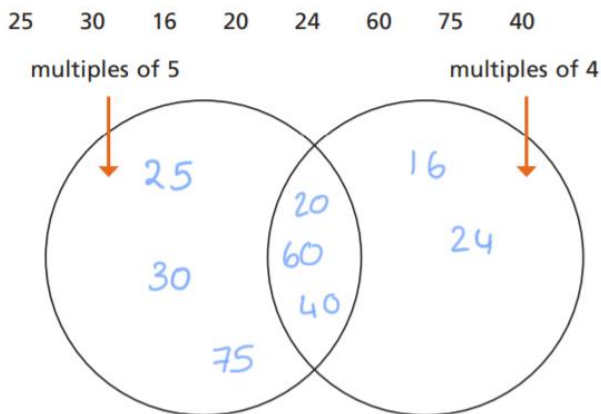
Write the numbers in the sorting diagram.



Complete the sentence.

The common factors of 15 and 24 are 1, 3

a) Write the numbers in the sorting diagram.



b) Write all the common multiples of 4 and 5 from the list.

20, 40, 60

c) Look at the common multiples of 4 and 5 from part b).

What do you notice?

Describe how to find more common multiples to add to this list.

Would you ever run out of common multiples?

Circle the prime numbers in each list.

a) 1 2 3 4 5 6 7

b) 17 22 9 36 21 35 23

c) 10 18 38 74 92 2 14

Medium

Find the common factors of each pair of numbers.

a) 12 and 20

1, 2, 4

b) 16 and 25

1

c) 20 and 50

1, 2, 5, 10

d) 20 and 60

1, 2, 4, 5, 10, 20

a) Complete the table.

Factor pairs of 50	Factor pairs of 75	Factor pairs of 100
1 × 50	1 × 75	1 × 100
2 × 25	3 × 25	2 × 50
5 × 10	5 × 15	4 × 25
		5 × 20

b) What are the common factors of 50, 75 and 100?

1, 5, 25

a) Continue the lists of multiples.

Multiples of 5

5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70

Multiples of 7

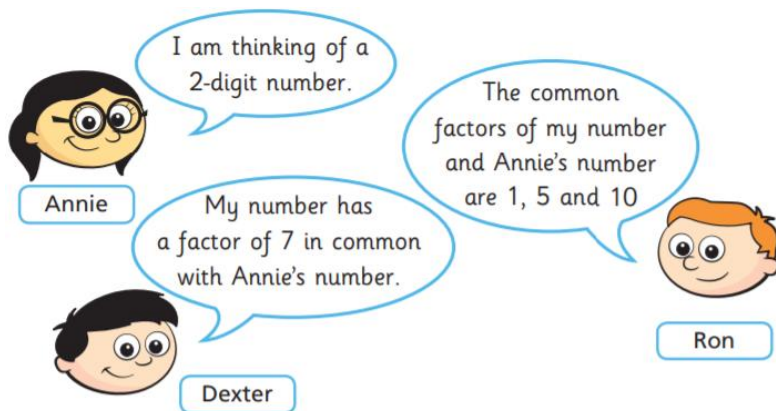
7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84, 91, 98

b) Circle the common multiples of 5 and 7

Write ten numbers in the sorting diagram. Each section must have at least one number. various answers e.g.

	Even	Not even
Prime	2	3, 5, 7
Not prime	4, 6, 8, 10	9, 15

Spicy



What number is Annie thinking of?

70

Whitney is trying to simplify these fractions.

$$\frac{18}{46}$$

$$\frac{24}{81}$$

$$\frac{40}{100}$$

$$\frac{121}{132}$$

I can use common factors to work out how to simplify these fractions.



Show how Whitney's method could work.

Eg. 18: 1, 2, 3, 6, 9, 18 $\frac{18}{46} = \frac{9}{23}$

46: 1, 2, 23, 46

$\div 2$

Talk about your answer with a partner.

Rita has 2 grandchildren in different years at school.

On Rita's 90th birthday she says to her grandchildren,

"My age is a multiple of both your ages today."

How old could Rita's grandchildren be?

Describe two different solutions.

Any ages from the list:
5, 6, 9, 10, 15

I think 87 is a prime number because it is odd and most numbers that end in 7 are prime.



Do you agree with Rosie? No

Test whether or not 87 is a prime number and show your reasoning.

$$87 = 3 \times 29$$

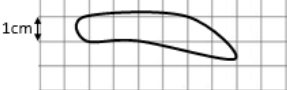
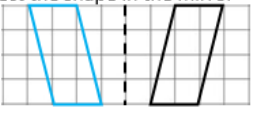
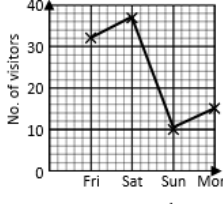
Thursday

Challenge Day!

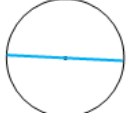
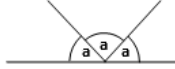
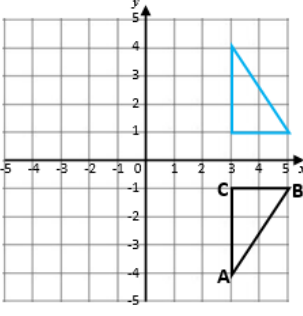
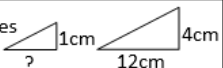
Friday

Key Skills

Mild

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure, Geometry and Statistics	
1. What is the value of the 2 in this number? 2,934,765	5:1 2,000,000 (million)	11. Write all of the factors of 18.	5:8 1, 2, 3, 6, 9, 18	21. If 1 kilogram is approximately 2.2 pounds, about how many kilograms are equal to 8.8 pounds?	5:20 4
2. Put these in order, smallest first: 212,285 32,956 110,000 85,253	5:1 32..., 85..., 110..., 212...	12. Which of the following are prime numbers ? 3 4 7 15 18	5:9 3, 7	22. Estimate the area of this shape:	5:21 6 or 7
3. Round 163,824 to the nearest ten thousand .	5:2 160,000	13. 1,016 x 8	5:10 8,128		
4. What is the missing number? 117,250 107,250 87,250	5:2 97,250	14. 9.2 ÷ 100	5:11 0.092	23. Reflect the shape in the mirror line.	5:28 Shape drawn
5. Put these in order, smallest first: -3, 1, -5, 0, 4, -2	5:3 -5, -3, -2, 0, 1, 4	15. What is 3³ ?	5:12 27		
6. What year is represented by these Roman Numerals? MCMXCV	5:4 1995	16. Put these in order, smallest first: $\frac{3}{5}$ $\frac{7}{10}$ $\frac{8}{15}$	5:13 $\frac{8}{15}$ $\frac{3}{5}$ $\frac{7}{10}$	24. Customers over a long weekend: How many customers were there on the busiest day?	5:29 37
7. 112,498 - 48,745 =	5:5 63,753	17. Find an equivalent fraction of $\frac{2}{4}$.	5:14 $\frac{1}{2}$ or $\frac{4}{8}$		
8. 34,857 + 79,384 =	5:5 114,241	18. Write the answer as a mixed number . $\frac{7}{8} + \frac{11}{8}$	5:15 $2\frac{2}{8}$	25. How many customers were there in total over the long weekend?	5:29 94
9. Complete this sum without written working. 15,200 - 2,050 =	5:6 13,150	19. $\frac{2}{9} \times 27 =$	5:16 6		
10. The temp. was -4°C. It rose by 9°C, then dropped by 4°C. What is it now?	5:7 1°C	20. Write 0.8 as a fraction.	5:17 $\frac{8}{10}$ or $\frac{4}{5}$		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	

Medium and Spicy

A: Place Value, Add, Subtract, Multiply and Divide		B: Fractions, Ratio, Proportion and Algebra		C: Geometry, Position and Direction	
1. Write in words: 2,134,005	6:1 Two million, one hundred and thirty four thousand and five	11. Simplify this fraction fully: $\frac{9}{36}$	6:7 $\frac{1}{4}$	21. Find the missing angle.	6:24 109°
2. What is the value of the 3 in this number? 3,954,682	6:1 3,000,000 (million)	12. $1\frac{5}{6} + \frac{1}{4} =$	6:8 $2\frac{1}{12}$	22. On the circle draw a line to label the diameter .	6:25 Line drawn
3. Round 8,523,912 to the nearest ten thousand .	6:1 8,520,000	13. $\frac{2}{8} \div 4 =$	6:9 $\frac{1}{16}$		
4. The temperature rises from -7°C to 9°C. How many degrees has it risen?	6:2 16°C	14. What is the value of the 8 in this number: 64.381	6:10 $\frac{8}{100}$	23. Find the value of a .	6:26 60°
5. 2,355 x 16	6:3 37,680	15. Give your answer as a decimal: 43.5 ÷ 6	6:11 7.25		
6. What is the remainder? 3,300 ÷ 19	6:3 13	16. Write this fraction as a decimal and a percentage . $\left(\frac{3}{5}\right)$	6:12 0.6, 60%	24. What are the co-ordinates of A ?	6:27 (3, -4)
7. Write two common factors of 30 and 45.	6:4 1, 5, 15	17. Find 20% of 180.	6:13 36		
8. There are four prime numbers between 10 and 20. What are they?	6:4 11, 13, 17, 19	18. These shapes are similar . 	6:14 3cm	25. Reflect triangle ABC in the x-axis .	6:28 Shape drawn
9. 85 - 8 x 7	6:5 29	19. 1 bag has s sweets. I get 2 bags. Write an expression for no. of sweets.	6:15 2 x s (or 2s)		
10. What is my change if I buy as many £5.98 footballs as I can with £30?	6:6 10p	20. Which two numbers add together to make 25 and have a difference of 1?	6:17 12 and 13		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	

